

Work Order ID 131811

Tuesday, April 21, 2015 2:05:40 PM

131811

Page 1

Item ID: D3651-9 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Inside Doubler
 Start Date: 4/20/15 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 4/20/15 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: CL Date: 15/04/22 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3651	Rev B

100 FLOW WATER JET 0.00
100
 Waterjet 2 0 Jm15-4-30
 FLOW CNC Waterjet 304.018
 Memo 0.00
 1-Cut as per Dwg D3651 Dwg Rev: B Prog Rev: B 2-
 Deburr if necessary

110 QC2- Inspect parts off machine FAI/FAIB 0.00
110
 QC 2 0 Jm15-4-30
 Quality Control Memo 0.00

120 QC8- Inspect parts - second check 0.00
120
 QC 2 0 Jm15-4-30
 Quality Control Memo 0.00

QAS
38
4-89
MAY 01 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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Page 2

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>ST 237A</u>	0.00							
130									
Packaging	Memo	0.00							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

240 MAY 04 2015

ML5 MAY 05 2015

ML5 MAY 05 2015

DQA: _____ Date: _____



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Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
☐ OTHER : _____					

Picklist Print

Tuesday, April 21, 2015 2:05:40 PM

Page 1
1

Work Order ID: 131811

131811

Parent Item: D3651-9

D3651-9

Parent Item Name: Inside Doubler

Start Date: 4/20/15

Required Date: 4/20/15

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A New Issue 07-09-27 DD verified by: EC
IPP Rev:B ECN 1113P 08-01-22 DD
IPP Rev:C ecn1162 08-04-02 DD verified by: EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S26GA		Purchased		No		110	sf	75.6567	0.431	1			
M304S26GA										**		Jm15-4-30	
304/316 0.018 SHEET													
						<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>			
						MAT020		75.6567					
						m130650		75.6567		130650			

DQA: _____ Date: _____



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Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

DART AEROSPACE LTD		Work Order:	131811
Description: Inside Doubler		Part Number:	D3651-9
Inspection Dwg: D3651 Rev: B		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

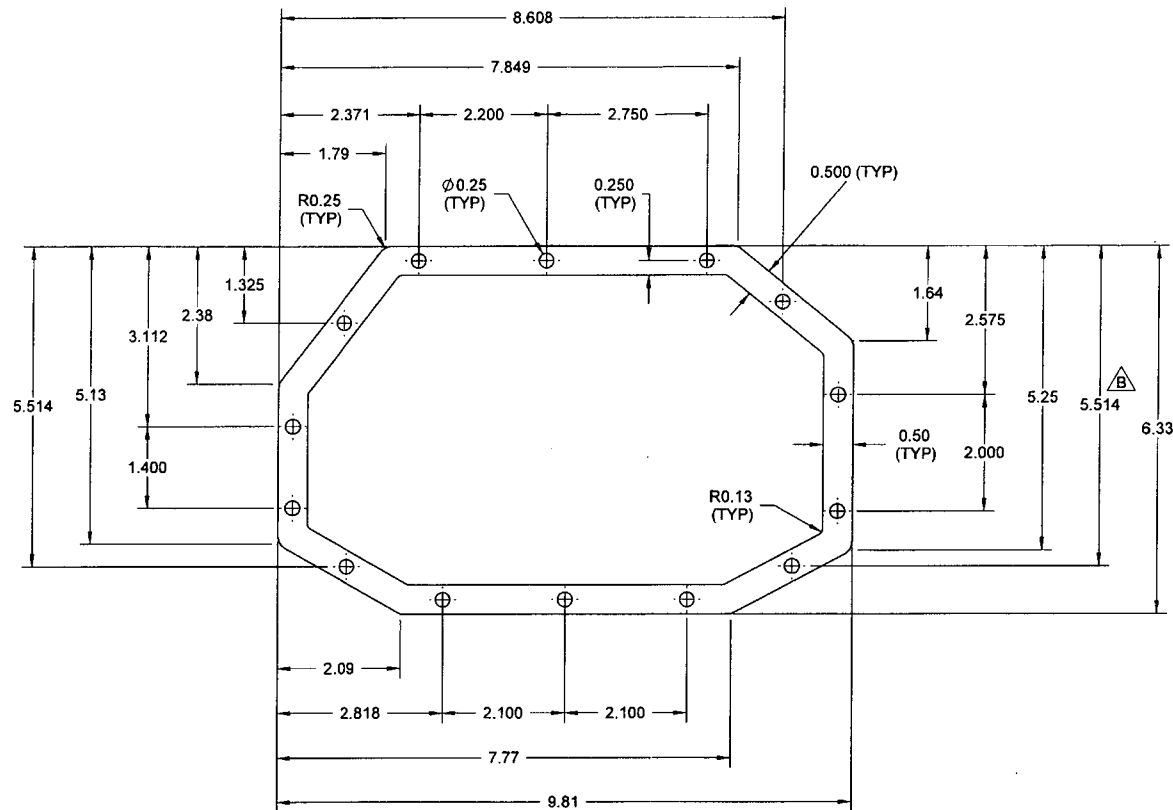
☒ **First Article**

 ☐ **Prototype**

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.25	+0.004/-0.001	0.250"	—		U	Jkmo1
0.250	+/-0.010	0.252"	—			
0.500	+/-0.010	0.503"	—			
6.33	+/-0.030	6.33"	—			
9.81	+/-0.030	9.81"	—			
2.818	+/-0.010	2.818"	—			
2.100	+/-0.010	2.102"	—			
2.100	+/-0.010	2.100"	—			
2.575	+/-0.010	2.575"	—			
2.000	+/-0.010	2.000"	—			
5.514	+/-0.010	5.514"	—			
2.750	+/-0.010	2.750"	—			
2.200	+/-0.010	2.205"	—			
2.371	+/-0.010	2.371"	—			
1.325	+/-0.010	1.325"	—			
3.112	+/-0.010	3.112"	—			
1.400	+/-0.010	1.400"	—			
5.514	+/-0.010	5.514"	—			

Measured by:	JM	Audited by:	32 9-89	Prototype Approval:	N/A
Date:	15-4-30	Date:	MAY 01 2015	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	08.04.17	New Issue	KJ/DD	



D3651-9 INSIDE DOUBLER

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.07 lbs

C815104122
W10:131811

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	LE	DRAWING NO.	REV. B
MFG. APPR.	WAG	D3651	SHEET 7 OF 9
APPROVED	WAG	TITLE	SCALE
DE APPR.	WAG	AFT BASE ASSEMBLY	1:2
DATE	08.01.07	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	